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U. S. DEPARTMENT OF AGRICULTURE--FOREST SERVICE
PACIFIC SOUTHWEST FOREST AND RANGE EXPERIMENT STATION
Division of Forest Insect Research

FOREST INSECT CONDITIONS
CLEVELAND AND SAN BERNARDINO NATIONAL FORESTS
AERIAL SURVEY
April 1960

On April 12 Ralph C. Hall of the Station, assisted by John Pierce, Area Technical Advisor for southern California forests, made an aerial survey of most of the potential insect problem areas on and adjacent to the Cleveland National Forest and a portion of the San Bernardino National Forest. The areas given the most attention were those normally difficult to survey from the ground. A Cessna 180 aircraft chartered from the Valley Air Services was used for this purpose for a total of two hours and 10 minutes flying time. The territory covered is essentially the same area as that flown April 19, 1959, except that around Pine Hills and Cuyamaca low clouds prevented an inspection in 1960.

The specific areas surveyed included the following on or adjacent to the Cleveland National Forest: Lost Valley, the eastern Julian area, Palomar Mt., Agua Tibia Wilderness Area, and Indian Canyon. In addition, the San Jacinto District on the San Bernardino National Forest was examined.

The following are the insect conditions observed:

Cleveland National Forest

Lost Valley.--The infestation of the California five-spined ips, Ips confusus (Lec.) and the western pine beetle Dendroctonus brevicomis Lec., noted last year in Coulter pine, appeared to be continuing in outbreak proportions. Many new groups of infested trees were observed. Last year's aerial inspection showed more of the grouping tendency in stands on the west side of the meadow, and only one group east of the meadow. This year the infestation on the west side of the meadow has subsided somewhat but substantially heavier loss was observed east of the meadow. Several large groups were seen south of the valley proper and about due east of Hot Springs Lookout. These latter groups appeared to be on the Los Coyotes Indian Reservation. Several other small groups were observed in fingers of fringe timber in the San Ysidro Creek drainage on the Reservation south of Hot Springs Mountain.

Julian - Pine Hills. -- Low clouds prevented most of this area from being seen from the air. However, a combination of aerial and ground observations indicated that bark beetle damage in Coulter pine is continuing at a high level, and the dead trees continue to occur in groups. Both the western pine beetle and the California five-spined ips are associated in this infestation. The loss in the Julian area appeared to be about the same as last year, but there was a considerable increase in group-loss in the Pine Hills area, particularly between Pine Hills and Cuyamaca Reservoir. In trees examined from the ground near Julian, the western pine beetle was found. Most of the brood were mature larvae, but some were pupae and a few callow adults. The populations in the basal portion were consistently low, but those in the Pine Hills area

were
/very high. The Julian infestation has been in outbreak for several years, while the one in the Pine Hills just started last year.

North Peak - Cuyamaca Area. --Insect damage on and closely adjacent to the North Peak Burn as appraised from the ground appears to have subsided. Ground observations also showed the Cuyamaca Rancho State Park to be relatively free of infestations, although R. H. Blanford from the State Division of Forestry reported a considerable buildup of the California flatheaded borer in Jeffrey pine in the Park during the past winter.

Palomar Mt. --In the aerial survey made one year ago, very little insect activity was noted on Palomar Mountain. In contrast this year considerable numbers of dead pine - probably Jeffrey and Coulter - were seen. The damaged trees tended to occur in groups and the heaviest concentration was in the Mendenhall Valley area, southeast of the Palomar Observatory. No groundcheck was made of this area.

Agua Tibia Wilderness Area. --The western pine beetle and ips outbreak observed in Coulter pine in the Agua Tibia Wilderness Area one year ago is expanding rapidly and appears to have at least doubled over that observed a year ago.

Indian Valley. --The outbreak of the California five-spined ips in Coulter pine observed from the air and ground a year ago is continuing at a rapidly increasing rate. One year ago two large groups were seen from the air, totaling about 70 trees. This year about a dozen groups occur in the same general area. It is estimated that the number of trees is two to three times that observed last season. No groundcheck was made of this area.

San Bernardino National Forest

In the San Jacinto District, the only district on the San Bernardino Forest covered in this aerial survey, a marked improvement in insect conditions was noted, where maintenance control has been in progress. Continuing damage was generally apparent from the air in several localities where no control has been undertaken. The localities in question and conditions noted were as follows:

Vista Grande. --Several small groups of insect-killed Coulter pine seen east and north of the Vista Grande Guard Station. There appeared to be little change over the situation one year ago.

May Valley. --This area had one of the heaviest concentration of loss in Coulter pine of any area observed one year ago, with groups of up to 90 trees each. Damage due to insects appeared to have declined by comparison with last year, but only slightly so.

Baldy Mountain. -- There was considerable damage to Coulter pine attributed to the western pine beetle and ips, and to Jeffrey pine attributed to the California flatheaded borer in this area. The damage appeared to have substantially increased over one year ago.

Santa Rosa Mt. --The aerial inspection of Santa Rosa Mountain was complicated by a heavy deposit of frost on the trees on the mountain top proper.

Some indication of insect activity was noted in white fir and Jeffrey pine at the western fringe of timber near the road where it enters the timber from the west. The Santa Rosa Indian Reservation sale area south of Toro Mt. was examined but no insectactivity was observed. This particular area was free of frost.

May 6, 1960
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Ralph C. Hall,
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Attachment

Some Current Insect Problem Areas
Southern California
April 1960